



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350-2000

IN REPLY REFER TO

OPNAVINST 3540.6B

N86

15 MAY 1995

OPNAV INSTRUCTION 3540.6B

From: Chief of Naval Operations

Subj: FLEET SERVICES FOR SENIOR OFFICER SHIP MATERIAL READINESS
COURSE (SOSMRC)

Encl: (1) Operational and Administrative Requirements
(2) Sample Schedule
(3) Records to be Reviewed by Senior Officers

1. Purpose. To provide information to facilitate planning and procedures regarding the goals, requirements, and other aspects of the operational phase of the Senior Officer Ship Material Readiness Course (SOSMRC).

2. Cancellation. OPNAVINST 3540.6A.

(R)

3. Discussion

a. As the culmination of 10 weeks of classroom training, 5-day operational ship visits are required near the end of each SOSMRC class in order to afford the senior officer students an opportunity to apply the principles learned during SOSMRC training through the observance of ship performance. Although these visits utilize inspection methodology, the objective is to train the senior officers. During the ship visits, the senior officer students will:

(R)

(1) Observe engineering and other drills appropriate to the ship class.

(2) Review Engineering, Combat Systems, Operations, and Deck Department administration.

(3) Conduct material inspections of shipboard spaces for inspector training.

(R)

(4) Conduct/observe level of knowledge interviews with supervisory personnel.

(R)



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4. Procedures.

- R) **a.** The SOSMRC Senior Instructor will request fleet services for each SOSMRC class from the Fleet Commanders in Chief, with information copies to the appropriate type commanders, in sufficient time for these services to be addressed at fleet scheduling conferences. Each SOSMRC class will require the nomination of four propulsion type platforms on each coast: one twin-screw gas turbine, one single-screw gas turbine, one 600 psi steam, and one diesel propulsion plant. As soon as a given SOSMRC class composition is known, normally about eight weeks prior to the ship visit date, SOSMRC will release the ships not required by notifying the appropriate type commander. SOSMRC will select the ships using the following guidelines:

(1) No prospective commanding officer should complete a SOSMRC operational phase on the ship he or she is to command.

- R) (2) A precise ship match for each senior officer student is not required. The senior officer should be embarked on a ship with the same type propulsion plant and combat system as his or her future command, however, variations within the type of propulsion plant will not be a scheduling constraint. For instance, a FFG-7 class ship is considered a sufficient training platform for a senior officer en route to command of a DD-963 class ship.

(3) Not more than five senior officer students and one instructor will normally be embarked in a ship.

(4) Cross-country travel to field-trip ships must be in support of one of the three previous guidelines.

- R) **b.** Following the fleet scheduling conferences, the Fleet Commanders in Chief will advise SOSMRC, via the type commanders, of the specific ships nominated to support SOSMRC. Ships nominated need not be dedicated solely to support SOSMRC; however, units scheduled for other major evolutions (e.g., Operational Propulsion Plant Examination (OPPE), Board of Inspection and Survey (INSURV), Afloat Training Group (ATG) visits, Mobile Training Team (MTT), Immediate Superior in Command Engineering Readiness Assessment (IERA), Combat Systems Readiness

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Review/Team (CSRR/CSRT), Final Evaluation Period (FEP)) should not be assigned concurrently with SOSMRC. SOSMRC welcomes the opportunity to observe exercises such as underway replenishments, firing exercises, helicopter or boarding operations, etc.

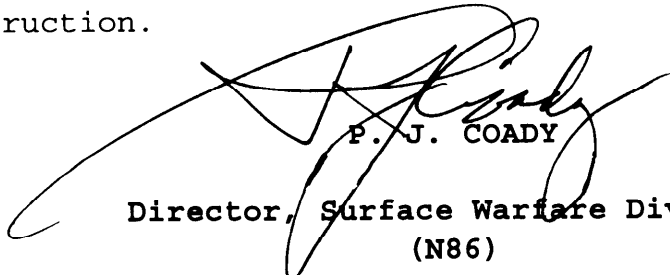
c. Prior to the ship visit, SOSMRC will advise all interested activities of ship assignments, and the names, security clearances, and itineraries of SOSMRC students and staff. (R)

d. If it is necessary to substitute one ship for another following the initial assignments, the type commander will advise all interested activities.

e. Operational and administrative requirements, a sample schedule, and a listing of records to be reviewed are provided in enclosures (1) through (3).

f. Since the ship visit is a practical exercise for the senior officers and not an inspection of the assigned ships, documentation in the form of notes or other data will be turned over to the commanding officer at the conclusion of the ship visit for use as he or she deems appropriate. Students may retain summary notes and copies of the ship's directives and logs for debriefing lessons learned or as instructional material. SOSMRC instructors and students are directed not to provide the results of their visits to the chain of command of the visited ship. The SOSMRC Senior Instructor may provide non-ship-specific synopses of recent visits to the type commanders when requested. Reports of SOSMRC visits, other than internal SOSMRC staff trip reports, are not required. Do not provide internal SOSMRC staff trip reports to outside commands. (R)

5. **Review.** The Director, Surface Warfare Division (N86) is responsible for periodic review and updating of the contents of this instruction. (R)


P. J. COADY
Director, Surface Warfare Division
(N86)

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OPERATIONAL AND ADMINISTRATIVE REQUIREMENTS

1. During the visit, the commanding officer retains complete responsibility for the safety of the ship and the crew. The decision to proceed with or terminate any evolution rests with the commanding officer.

2. Senior Officer Ship Material Readiness Course students will validate their training with a 5-day period on board operating ships. Ships will be notified by message of senior officer/instructor team assignments and security clearances. Honors are not desired on arrival or at any other time during the period of the visit. The team will require accommodations aboard for the underway period but will be accommodated ashore during the inport days. The Senior Officers/instructor team will not normally require transportation to and from the ship. Two parking spaces should be reserved by the ship.

3. The commanding officer, executive officer, and department heads should be available upon arrival of the team to discuss the schedule and conduct of the visit. The five days on board ship will ideally consist of the following:

a. Four days of ship personnel and propulsion plant availability.

(1) One day inport for:

(a) Familiarization tours of the propulsion plant, combat systems, and associated spaces.

(b) Observation of the use of the Engineering Operational Sequencing System (EOSS), Master Lightoff Checklist (MLOC), and propulsion plant startup to self-sustaining on ship's power.

(c) Observation of the use of the Combat Systems Operational Sequencing System (CSOSS) and Combat Systems Master Light-off Checklist (CSMLOC) to conduct start up to full readiness for underway operations.

Enclosure (1)

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- (d) Observation of an inport emergency drill.
- (e) Review of various logs, records, and management programs.
- (2) Approximately 2 days underway to:
 - (a) Observe full power demonstration.
 - (b) Observe flexibility test on one boiler (where applicable).
 - (c) Observe casualty control (engineering and combat systems) drills, to include a Main Space Fire Drill, and the rigging and energizing of casualty power, and an Integrated Training Team (ITT) drill.
 - (d) Conduct a material inspection of selected spaces.
 - (e) Conduct oral examinations of selected supervisory personnel.
 - (f) Conduct Close-In Weapons Systems (CIWS), Daily Systems Operability Test (DSOT) and pre-action calibration (PAC) firing of installed gun systems.
 - (g) Observe ballasting/de-ballasting demonstration for amphibious ships with this capability.

(3) One day inport or underway for the conduct of various evolutions that demonstrate the mission capabilities of the ship. For example, on a cruiser-destroyer (CRUDES) ship, SOSMRC students will:

- (a) Attend pre-briefs and observe Overall Combat Systems Operability Test (OCSOT), DSOT, and Systems Consolidated Operability Test (SCOT).

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- (b) Review departmental training records, Personnel Qualification Standards (PQS) records, Planned Maintenance System (PMS) records, Tag-Out records, Current Ship's Maintenance Project (CSMP) management, Maintenance Assist Modules (MAMs) control, combat systems technical library, configuration control records, and 4790-CK configuration change reports.

b. One day for the Senior Officers to collate their findings and brief the commanding officer. The senior officers will offer recommendations based upon their observations.

4. The following additional information is provided to assist in preparing for the visit:

a. Administrative Review.

(1) The ship should provide the following information at the arrival brief:

- (a) Listing of personnel in key billets.
- (b) Listing of administrative program managers.
- (c) Listing of key phone numbers.
- (d) Listing of normal meal hours and hours of other services.
- (e) Stateroom assignments and meal charges.

(2) At the arrival meeting, SOSMRC will specify records (from enclosure (3)) the senior officers desire to review. A central area, not essential to daily operations, should be provided to facilitate review of these records. In every case the following technical documentation should be made available in that location:

- (a) Current watch bills for engineers, bridge, and CIC.

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- (b) Main Engine, Gas Turbine Module, or Main Propulsion Diesel Engine Technical Manual.
- (c) Boiler Technical Manual.
- (d) Ship's Service Turbine Generator (SSTG)/Gas Turbine Generator (GTG)/Ship's Service Diesel Generator (SSDG) Technical Manual.
- (e) Main Reduction Gear Technical Manual.
- (f) Main Space Fire Doctrine.
- (g) Restricted Maneuvering Doctrine.
- (h) Commanding Officer's and Engineer's Standing Orders.
- (i) Battle Orders.
- (j) Ship's departmental organization and regulation manuals.

b. Propulsion Plant Operations.

(1) Casualty Control Drills. The listing of casualty control drills proposed by the ship will be provided at the arrival meeting. If additional/alternate drills are desired, they will be requested after a review of the proposed drill schedule. Only those drills approved by the commanding officer will be conducted. The drills will be initiated, conducted, and terminated by personnel designated by the commanding officer. The senior officers will not be involved in drill conduct nor should they be assumed to be safety observers. The ship will be requested to perform a major propulsion plant class "B" fire drill to enable the senior officers to observe the effectiveness of the ship's Main Space Fire Doctrine, and repair party and watchstander performance. The ship should be prepared to conduct two sets of drills of about three hours each. Realism and worthwhile training are more important than the number of drills run. SOSMRC students will attend drill planning meetings, Engineering Casualty Control Training Team (ECCTT), Damage

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Control Training Team (DCTT), Combat Systems Training Team (CSTT), Seamanship Training Team (STT) and Integrated Training Team (ITT) pre-briefs, and critiques with watchstanders.

(2) Boiler Flexibility and/or High Power Demonstration.

- (a) A boiler flexibility demonstration of one boiler should be conducted to demonstrate the requirements and preparations necessary to perform this test and the propulsion plant's capability to respond to rapid changes of maneuvering orders with boiler control in full automatic.
- (b) Following an appropriate build-up, a high speed demonstration, at or near full power, of not more than one hour should be conducted to demonstrate propulsion plant capability, watchstander proficiency, procedural adequacy, and the operability of propulsion components under high load conditions. The commanding officer shall establish that all required safety devices operate as designed, meet required settings, and are current in their preventive maintenance checks.

(3) Material Inspection. A material inspection will be conducted to include an observation of the material condition of selected main propulsion, electrical, and auxiliary equipment spaces.

c. Combat Systems/Deck/Operations Departments.

(1) OCSOT/DSOT/SCOT. The senior officers will require copies of the appropriate documentation such as the Maintenance Requirement Card (MRC) and Combat Systems Operational Sequencing System (CSOSS) (if installed). Several headsets for monitoring the OCSOT/DSOT/SCOT coordination circuit should be provided in the vicinity of the test coordinator. The senior officers will attend the pre-test brief and the post-test critique/summary.

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(2) Combat system casualty control drills. The Senior Officers should be provided the opportunity to observe two sets of combat system casualty control drills. One set should be conducted during routine steaming and a second set should be conducted during General Quarters. The Ship's Electronic Repair Team (SERT) should be required during at least one set of drills. Drill(s) requiring the Ship's Electronics Repair Team (SERT) should require the drawing of repair parts during periods other than normal supply department working hours/routine.

(3) Live firing runs and target services. Live firings may be used to supplement the conduct of an OCSOT but should not be scheduled in lieu of an OCSOT. Target services may be arranged for evolutions desired by the ship but are not specifically required for SOSMRC support.

(4) Material inspection. The material inspection may encompass all combat systems/communications associated spaces except limited access and exclusion areas. The material inspection shall be conducted as a zone inspection in the same manner as described for the engineering department material inspection. The SOSMRC instructor will provide a list of the spaces to be inspected shortly after completing the combat systems tour.

5. On the final day, the senior officers and staff instructors will meet with the commanding officer to discuss findings and make recommendations. In order to encourage frankness, it is strongly recommended that only the commanding officer attend the departure briefing given by the senior officers.

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SAMPLE SCHEDULE

Note: Times are representative and shown for example only.

Monday

0815	Arrival of the SOSMRC Party
0815-0900	Meeting with CO, XO, and Department Heads
0900-1130	Tour of engineering/combat systems/electronics spaces
1130-1145	Planning Meeting for SOSMRC instructor and Senior Officers
1230-1700	Observe MLOC, CS MLOC, and pre-underway steering checks
TBD	Observe engineering plant start-up to self-sustaining
TBD	Observe pre-underway navigation brief
TBD	Observe Combat Systems light-off to readiness for underway operations
TBD	Observe inport casualty response team drill
1800	Meeting of SOSMRC instructor and Senior Officers

Tuesday

0600-0630	Arrival of the SOSMRC Party
0630-0800	Observe pre-underway checks in combat systems, communications, deck, and engineering spaces
0715	Propulsion plant light-off (Gas Turbine/Diesel)
TBD	Underway

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TBD	Observe special sea and anchor detail procedures in engineering spaces
TBD	Begin administrative reviews
1215-1300	Meeting of SOSMRC instructor and Senior Officers
1300-1700	Brief and conduct engineering casualty control drills
TBD	Debrief engineering casualty control drills
TBD	Boiler flexibility test, full power demonstration
TBD	Continue engineering administrative program review
2000-2100	Meeting of SOSMRC instructor and Senior Officers
2300-0600	Unannounced accompanying of the Sounding and Security Watch by Senior Officers

Wednesday

0630-0730	CIWS DSOT/PAC firing
0730-0800	ECCTT/DCTT/CSTT/STT and ITT briefs
0830-1100	ITT scenario to include: Engineering casualty control drills with main space fire, rig and energize casualty power and combat systems casualty control drills
1100-1200	Administrative program reviews
1245-1315	Meeting of SOSMRC instructor and Senior Officers
1315-1700	Conduct oral examinations of supervisory watchstanders
1800-2100	Continue administrative program reviews
2300-0600	Unannounced accompanying of the Sounding and

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Wednesday (continued)

Security watch and CSOOW (if applicable) by Senior Officers

Thursday

0630-0800 Commence review of combat systems administrative programs. Observe DSOTs

0800-1130 OCSOT brief, performance, debrief

1215-1245 Meeting of SOSMRC instructor and Senior Officers

1245-1530 Oral examination of supervisory watchstanders

1530-1600 ITT brief

1600-1730 Combat systems casualty control drills. Observe SERT/CSTT

1815-1900 Critique and debrief of combat systems casualty control drills

1930-2200 Space material inspection

2300-0600 Unannounced accompanying of the Sounding and Security watch by Senior Officers

Friday

TBD Station the special sea and anchor detail. Senior Officers observe the return to port in CIC, Main Control, Bridge, and shore power stations.

TBD Observe the rigging and test of shore power cables

0930-1130 Meeting of SOSMRC instructor and Senior Officers. Prepare briefing remarks

1230-1400 Continue briefing preparations

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Friday (continued)

1400-1600	Brief the Commanding Officer on the results of the visit
1600	Operational phase complete. Senior Officers depart.

RECORDS TO BE REVIEWED BY SENIOR OFFICERS

The Senior Officers will review ship and administrative records from the Engineering, Operations, Combat Systems, and Deck Departments, and may request individual PQS qualification cards, work center PMS MRC decks, and other records that, due to their numbers, cannot all be reviewed. Directives, publications, logs, and records indicated below or in support of the program indicated should be made available on a selected basis in an easily accessible area.

1. Ship's Training Program
2. Applicable watchstation PQS
3. Damage Control PQS
4. 3-M PQS
5. Current watchbills for all departments for the underway and inport periods covered by the SOSMRC visit. A description of duties shall be provided for unusual watches.
6. Engineering Department Plan of Action and Milestones (POA&M)
7. EOSS and CSOSS Master Copies and Feedback Files
8. Casualty control training procedures and organization and assignment of personnel to ECCTT and CSTT
9. Command Safety Program (includes mechanical, electrical, and gas free safety procedures)
10. Ship's Tag-Out program
11. Ship's Management Program for the Detection and Correction of Material Deficiencies (Zone inspection program)
12. Repair party organization, assignment and qualification of personnel, locker stowage, and operability of equipment
13. Engineering Equipment Operating Logs and Records (covering the previous two steaming months)
14. Combat Systems Operational Sequencing System
15. Ship's Organization and Regulations Manual (SORM)

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16. Engineering Department Organization and Regulations Manual (EDORM)
17. Combat Systems Department Organization Manual (or Weapons/Deck)
18. Ship's Information Book (SIB)
19. Engineering Department directives including the Restricted Maneuvering Doctrine
20. Combat systems directives including Battle Orders
21. Latest Full Power and Economy Trial Reports
22. Steam Generator Records of Inspection
23. Boiler Tube Renewal Records
24. Marine Gas Turbine Equipment Service Records
25. Boiler (auxiliary boiler/waste heat boiler) Water and Feedwater Treatment Logs
26. Diesel Engine Trend Analysis
27. Diesel Engine Jacket Water Testing Records
28. Casualty Power Doctrine
29. Lightoff Orders
30. Refueling and transfer instructions
31. Main Space Fire Doctrine
32. Heat Stress Monitoring Program
33. Hearing Conservation and Monitoring Program
34. Repair Party Manual
35. Damage Control Book
36. Lubricating and Fuel Oil Quality Management Program
37. Casualty control training drill scenarios